BE-4A CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-21M3A	RM-836	Italian	SCC-J05FA	KV-21M3K	RM-836	OIRT	SCC-J03KA
KV-21T3A	RM-836	Italian	SCC-J05GA	KV-21T3K	RM-836	OIRT	SCC-J03LA
KV-21M3B	RM-836	French	SCC-J06HA	KV-21M3L	RM-836	Irish	SCC-J02EA
KV-21T3B	RM-836	French	SCC-J06JA	KV-21T3L	RM-836	Irish	SCC-J02FA
KV-21M3D	RM-836	AEP	SCC-J08GA	KV-21T3R	RM-836	OIRT	SCC-J03MA
KV-21T3D	RM-836	AEP	SCC-J08HA	KV-21M3U	RM-836	UK	SCC-J01FA
KV-21M3E	RM-836	Spanish	SCC-J04GA	KV-21T3U	RM-836	UK	SCC-J01GA
KV-21T3E	RM-836	Spanish	SCC-J04HA				
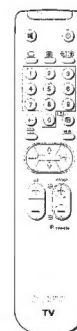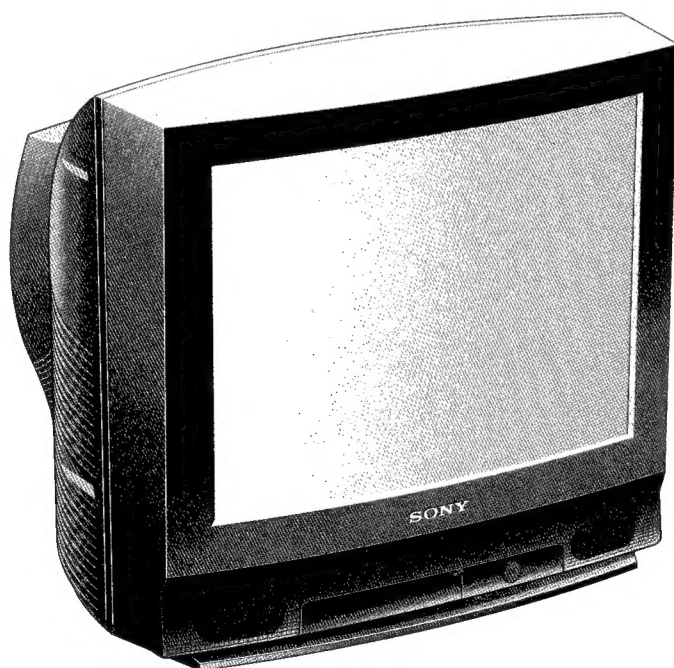
TRINITRON® COLOR TV
SONY®

ITEM MODEL	Television System	Channel Coverage	Colour System
Italian	B/G/H	VHF: E2-E12, S1-S20 UHF: E21-E69, S21-S41 HYPER: S1-S41	PAL
French	B/G/H, L	VHF: E2-E12, F2-F10, B-Q UHF: E21-E69, F21-F69 HYPER: S1-S41	PAL, SECAM
AEP	B/G/H	VHF: E2-E12 UHF: E21-E69 HYPER: S1-S41	PAL, SECAM
Spanish	B/G/H	VHF: E2-E12 UHF: E21-E69 HYPER: S1-S41	PAL
OIRT	B/G, D/K	B/G VHF: E2-E12 UHF: E21-E69 D/K VHF: R01-R12 UHF: R21-R69 Hyper : S1-S41	PAL, SECAM
Irish UK	I	UHF: U21-U69 VHF: A-J (Irish) UHF: U21-U69 (UK)	PAL

MODEL	21M3A 21T3A	21M3B 21T3B	21M3D 21T3D	21M3E 21T3E	21M3K 21T3K 21T3R	21M3L 21T3L	21M3U 21T3U
Power Consumption	58W	58Wh	58W	58W	58W	58W	75W

SPECIFICATIONS

Picture Tube	Super Trinitron Approx. 54.5 cm (21 inches) (Approx. 51 cm picture measured diagonally)

Rear/Front Terminals

[REAR]

- 1 21-pin Euro connector (CENELEC standard)
- Inputs for audio / video signals
- Inputs for RGB

[FRONT]

- Video (phono jack)
- Audio (phono jacks)
- Headhpone jack - minijack

Sound output	4W (RMS) 5W (music power)
Dimensions	518x474x488 mm approx.
Weight	Approx. 20 kg
Supplied accessories	RM-836 Remote Commander (1) IEC designated batteries (2)
Other features	TELETEXT (for KV-21T3 models)

[RM-836]

Remote control system	Infrared control
Power requirements	3V dc (2 batteries) R6 (size AA)
Dimensions	Approx. 210x45x24 mm (v/h/d)
Weight	Approx. 90g (Not including battery)

Design and specifications are subject to change without notice.

TABLE OF CONTENTS

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANS FORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND, IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE PUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.
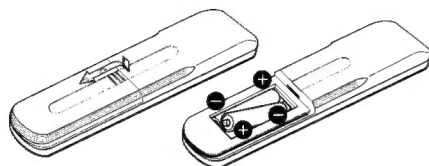
The operating instructions mentioned here are partial abstracts from the Operating Manual. The page numbers of the Operating Instruction Manual remain as in the manual.
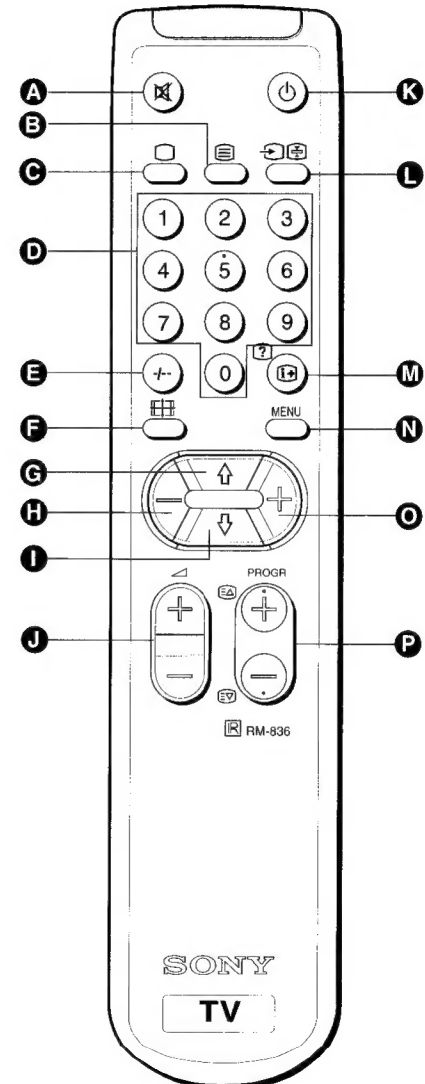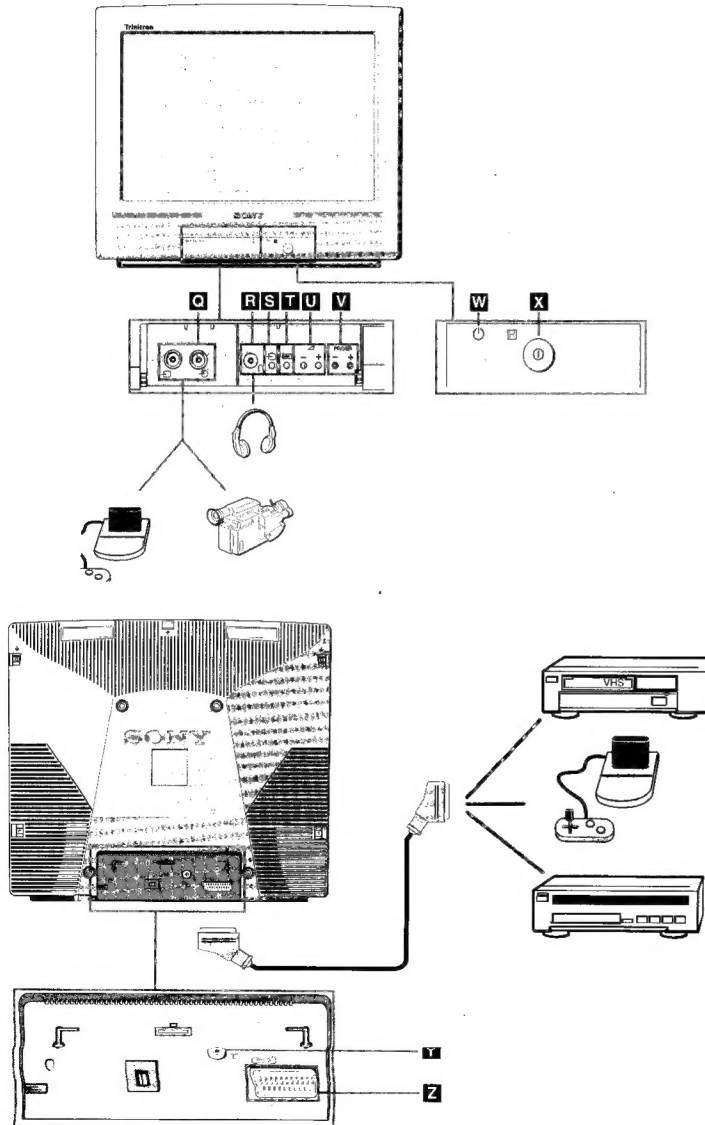
Step 1

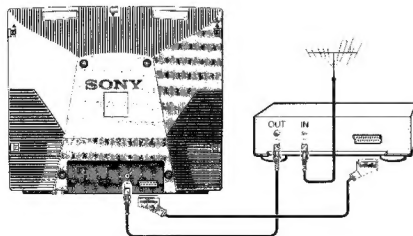# Inserting the Batteries into the Remote Commander

Step 2

Connecting the Aerial

If you are connecting a VCR, skip to step 3.

Connect an external aerial to the socket ⫟ **Y**.

Step 3

Connecting a VCR

- It is recommended to tune in the VCR signal to programme number "0". For details, see "Presetting Channels Manually" on page 12.
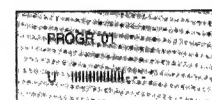
Step 4

Presetting Channels Automatically

TV searches for all available channels. If manual tuning is preferred see Menu option - Presetting Channels Manually.

1 Plug into mains.
Press power switch ① **X** on TV set.

2 Press and hold **▶▶I** **T** on TV set for about 2 seconds. Auto tuning starts and the following screen shows.

Notes • When Auto tuning stops the programme on position 1 is seen.
- **Non Teletext models (KV-21M3U/21M3L only)**
– channels are stored in no particular order.
- **Teletext models (KV-21T3U/21T3L only)**
– channels are automatically stored as follows:

	KV-21T3U	KV-21T3L
Programme 1	BBC1	RTE1
Programme 2	BBC2	RTE2
Programme 3	ITV	BBC1
Programme 4	CH4 or S4C	BBC2
Programme 5	CH5 (if available in your area)	ITV
Programme 6	-	CH4 or S4C
Programme 7	-	CH5 (if available in your area)

TV Operation

This section explains functions used whilst watching TV. Most operations are carried out using the Remote Commander.

To	Press
Switch on	① Ⓧ on TV
Switch off temporarily	ⓛ Ⓚ TV is now in standby mode, ⓛ indicator Ⓦ on TV lights.
Switch on again	◯ Ⓒ, PROGR +/- Ⓟ Ⓥ or any number button Ⓓ
Switch off completely	① Ⓧ on TV To save energy we recommend switching off completely when TV is not in use.
Select programmes	PROGR +/- Ⓟ Ⓥ or number buttons Ⓓ For double digit numbers press -/-- Ⓔ then the number e.g. For 23, press -/-- Ⓔ then 2 and 3.
Display the programme number	ⓘ+Ⓜ Press again to make programme number disappear.
Adjust the volume	⊿+/- Ⓞ Ⓤ
Mute the sound	ⓧ Ⓐ Press again to restore sound.
View video input	⊝ Ⓘ Ⓢ Press ◯ Ⓒ to return to TV programme.
View RGB input (eg to connect playstation)	⊝ Ⓘ Ⓢ twice. RGB ⊝ will appear on screen Press ◯ Ⓒ to return to TV programme.
View programmes in 16:9 mode	⊞ Ⓕ Press again to return to 4:3 mode.

Note • ⊞ Ⓕ is to be used to optimise the viewing of 16:9 signals, which will be available in the future.

Viewing Teletext

Teletext is an information service broadcast by TV stations.

1 Select the channel which carries the teletext service you wish to receive.

2 Press ▤ Ⓑ to switch on teletext.

3 Input three digits for the page number using the programme number buttons Ⓓ or PROGR +/- Ⓟ Ⓥ.

4 Press ◯ Ⓒ to switch off teletext.

Note • Teletext errors may occur if the broadcasting signals are weak.

Using Other Teletext Functions

Superimposing teletext on the TV
Press ▤ Ⓑ once in teletext mode or twice in TV mode to superimpose teletext on the TV screen.
Press ▤ Ⓑ again to cancel superimposing.
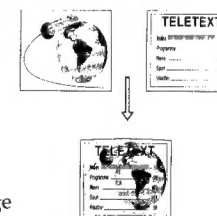
Freezing a teletext subpage
Press ⊞ Ⓛ (HOLD) to freeze the subpage. Freezing the page prevents the information that is displayed from being updated.
Press ⊞ Ⓛ to cancel HOLD and allow update to continue.

Revealing concealed information (eg: answers to a quiz)
Press ⑦ Ⓜ to reveal information.
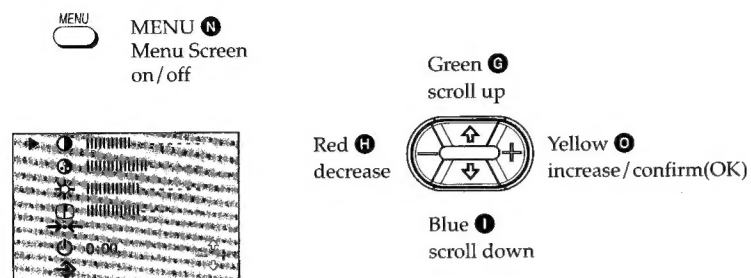Press again to conceal the information.

Using colour buttons to access pages
When the colour coded menu appears at the bottom of a page, press the colour button (red, green, blue or yellow) Ⓗ Ⓖ Ⓘ Ⓞ to access the corresponding page.

Note • A programme status message in a blue box may appear when you change programmes (depends on broadcasters).

Use buttons on Remote Commander to control Menu screen.

MENU **N**
Menu Screen
on/off

Green **G**
scroll up

Red **H**
decrease

Yellow **O**
increase/confirm(OK)

Blue **I**
scroll down

Adjusting the Picture

1 Press MENU **N**.

2 Press green **G** or blue **I** button to select the item you wish to change.

| Symbol	Item	- Effect	+
O	Picture	Less	More
G	Colour	Less	More
☼	Brightness	Darker	Brighter
OD	Sharpness	Softer	Sharper

3 Press red **H** or yellow **O** button to change levels.

4 Press MENU **N** to return to normal TV screen.

Note • To reset to factory preset picture levels, press green **G** or blue **I** button to select ◄►◄ and press yellow (OK) **O** button.

Using the Sleep Timer

The TV may be set to switch to the standby mode automatically after a length of time chosen by you. You may set the time in 30 minutes steps up to 4 hours.

1 Press MENU **N**.

2 Press green **G** or blue **I** button to select ⏻.
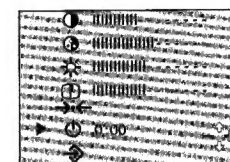
3 Press red **H** or yellow **O** button to set time delay.
0.00 (OFF) 0.30 1.00 1.30 .... 4.00

4 Press MENU **N** to return to normal TV screen.
When watching TV, press **(I+)M** to display time remaining.

Auto Standby
## (for TV mode only)

As a safety feature the Auto Standby function has been added to this model.
If no signal is received for a period of 30 minutes, the TV will automatically switch to standby mode.

To return to normal TV operation, press ▢ **C**, PROGR +/- **P V** or any other number button **D**.

Presetting Channels Manually

Up to 100 programme positions are available for presetting channels.

1 Press MENU **N**.

2 Press green **G** or blue **I** button to select ↔ and press yellow (OK) **O** button.

**3** Select programme number using PROGR +/- **PV** or the number buttons **D**.
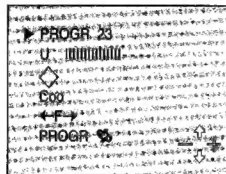
4 Press green **G** or blue **I** button to select tuning bar (|||||…) and press red **H** or yellow **O** button to start channel search. When a channel is found the tuning bar stops moving and you see the picture.

5 If you want to store, press green **G** or blue **I** button to select ◇ and press yellow (OK) **O** button. If you do not want to store, press red **H** or yellow **O** button to continue search.

6 Repeat steps 3 to 5 for all other channels.

7 Press MENU **N** to return to normal TV screen.

Skipping Programme Positions

You can skip unused programme positions when selecting channels with the PROGR +/- **PV** buttons. You can still select them, however, using the number buttons **D**.

1 Press MENU **N**.

2 Press green **G** or blue **I** button to select ↔ and press yellow **O** button.

**3** Select programme number you want to skip using PROGR +/- **PV** button or number buttons **D**.
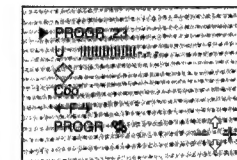
4 Press green **G** or blue **I** button to select Coo and press yellow (OK) **O** button.

5 Press green **G** or blue **I** button to select ◇ and press yellow (OK) **O** button to store.

6 Repeat steps 3 to 5 for other unused programme positions.

7 Press MENU **N** to return to normal TV screen.

Note • To restore a skipped programme number, refer to "Presetting Channels Manually".

Fine-Tuning
Channels

You can fine tune a stored channel if necessary.

1 Select the channel you wish to fine tune.

2 Press MENU ⊙.

3 Press green ⊙ or blue ❶ button to select ⇄ and press yellow (OK) ⊙ button.

4 Press green ⊙ or blue ❶ button to select ←F→ and use red ❶ or yellow ⊙ button to adjust tuning.

5 Press green ⊙ or blue ❶ button to select ◇ and press yellow (OK) ⊙ button to store.

6 Press MENU ❶ to return to normal TV screen.
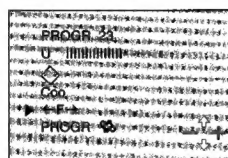
Exchanging
Programme Positions

After tuning you may wish to change the order of the channels on your TV.

1 Press MENU ⊙.

2 Press green ⊙ or blue ❶ button to select ⇄ and press yellow (OK) ⊙ button.

3 Press green ⊙ or blue ❶ button to select PROGR ⚛ and press yellow (OK) ⊙ button.

4 Press red ❶ or yellow ⊙ button until the channel you wish to rearrange appears on screen, then press the blue button once.

5 Press red ❶ or yellow ⊙ button to select the new programme number (eg PROGR 01) for your selected channel.

6 Press blue ❶ button to select ⚛ and press yellow (OK) ⊙ button to exchange the channels.

7 Repeat steps 4 to 7 if you wish to change the order of the other channels on your TV.

8 Press MENU ❶ to return to normal TV screen.
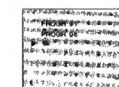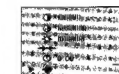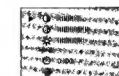
Using the Connectors

Your TV has one 21-pin connector ▨ on the rear of the set and two connectors (phono jacks: ⊕ video, ⊕ audio) ◙ on the front of the set. You can connect optional audio or video equipment to these connectors, such as a VCR, video games or a video disc player.
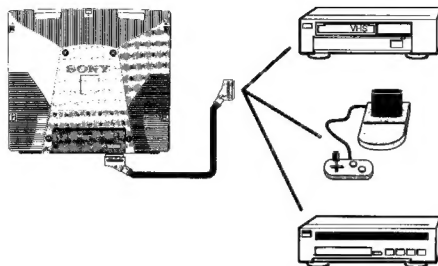
1 Press ⊕◙◙ to view the video input signal.

2 Press ⊕◙◙ again to view RGB/playstation signal.
RGB ⊕ will appear on screen.

3 Press ⊕◙◙ or ⊙ ◙ to return to the normal TV screen.

Note • To avoid picture distortion, do not connect equipment to the 21-pin connector and the front connectors at the same time.

Connecting Headphones

Plug in the headphones to the ∩ ◙ socket on the front of the TV set to mute the sound from the speaker.

Troubleshooting

Here are some simple solutions to the problems which affect the picture and sound.

Problem	Solution
No picture, screen is dark, no sound	• Plug the TV in. • Press ⊙ ◙ on the TV. • Press ⊙ ◙ or the programme number ◙ on the remote commander if ⏻ indicator ◙ is on. • Check the aerial connection. • Check that the video source is on. • Turn the TV off for 3 or 4 seconds and then turn it on again using ⊙ ◙.
Poor or no picture (screen is dark, sound is good)	• Press MENU ◙ and adjust brightness picture and colour levels.
Good picture, no sound	• Adjust the volume ◁ +/– ◙◙. • Disconnect any headphones. • Press ⊠ ◙ if ⊠ is displayed on the screen.
No colour on colour programmes	• Press MENU ◙ and adjust colour balance. • Press MENU ◙ and reset to factory settings.
Distorted picture when you change programmes or select teletext	• Turn off the equipment connected to the 21-pin connector ▨ when this equipment is not in use.
Remote commander does not function	• Replace the batteries.

• **If you continue to have these problems, have your TV serviced by qualified personnel.**
• **NEVER open the casing yourself.**